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The Flank Cat Spay: An Example of Eminence-Driven Fashions in Veterinary Surgery

Stephen May MA VetMB PhD DVR DEO FRCVS DipECVS FHEA

Royal Veterinary College, Hawkshead Lane, North Mymms, Hatfield, Hertfordshire, AL9 7TA

Introduction

Evidence-based medicine (Sackett et al 2000) and veterinary medicine (Cockcroft and Holmes 2003) have been emphasised in recent years as essential to both the maintenance and advancement of high standards of clinical practice. In particular, the evidence-based approach must be distinguished from “eminence-based”, or even “celebrity-based” (Ernst and Pittler 2006) medicine where individual practitioners uncritically adopt the practices of articulate and well-known colleagues because of the reputation of the individual rather than the underlying scientific basis of a treatment being promoted (Wood 1999, Greenhalgh 2001). Critics of the modern evidence-based medicine school have been quick to point out the difficulties in its application to every case in busy clinical practice (Ghali et al 1999). Much is undertaken based on received professional wisdom that begins to be adopted from the earliest years of clinical education. This apparent inconsistency has recently been highlighted by a final year medical student “throughout studies for our medical degrees, we are taught that evidence-based medicine is the way forward, yet, within the medical profession, there are many techniques and conventions that have been handed down from teacher to student, the origins of which have been lost, and there is also little evidence base for them” (Jones 2008).

For many years, I have been intrigued by the predominance of the left flank approach for ovariohysterectomy in the female cat in the UK (e.g. Hickman et al 1995) in contrast to the predominance of the ventral midline approach (e.g. Gourley and Gregory 1992) in other parts of the world (McGrath et al 2004). Jones’ (2008) article led me to hypothesise that this could be an example of a technique that had been “handed down the origins of which had been lost”, and that this core technique in the repertoire of all first-opinion small animal practitioners could represent just one example of an eminence-driven fashion in veterinary surgery!

Method and Results

An internet search was conducted, but, as is usual with this type of question, it failed to reveal any material of use, as the relevant archives are not accessible via this route. Therefore, a manual search of the Royal Veterinary College’s historical collection was undertaken. The approach could be described as one of iterative “book-ending”, whereby the period within which the search was being conducted was progressively narrowed by successive movement of metaphorical “bookends” either end of an imaginary shelf of chronologically arranged resources. This quickly revealed the advocacy, in 1900, of a ventral midline approach by Hobday, based on surgery performed in the previous seven years “in the Free Outpatients’ Department of the Royal Veterinary College” and the description, in 1946, of the lateral approach in the *Veterinary Record* in its “Question and Answer” series that ran from 1944. Further searching identified sporadic case reports that involved the ventral approach (e.g. Burrell 1926) and exposed the late 1920s and early 1930s as the important period for investigation. Within these years, two key articles, one describing activities at an Annual Regional Meeting of the National Veterinary Medical Association (NVMA) (Mitchell 1928) and one on “Every-day surgery in small animal practice” (Wright 1933), were discovered that predated the Question and Answer series article (Anon 1946). The lateral approach was demonstrated by W M Mitchell

(Professor of Surgery at the Royal (Dick) Veterinary College, Edinburgh) at the Annual Meeting of the North of England Division of the NVMA at Newcastle, in 1928, and J G Wright identified it as having been introduced to the Royal Veterinary College by his predecessor, A R Smythe (Professor of Materia Medica 1926-1929), and promoted it at a meeting of the Lancashire Division of the NVMA and in the *Veterinary Record* in 1933. This advocacy was further reinforced, 13 years later, by the publication of the classic diagram of landmarks for the skin incision for the lateral approach published in the *Veterinary Record* in 1946 in response to a practitioner's enquiry (Figure 1).

Discussion

The evidence suggests that the widespread adoption of the lateral approach to the cat spay in the UK is down to the influence of two or three important veterinarians of their age and the dissemination opportunities provided by a regional Veterinary Medical Association meeting and a professional journal. However, for an idea to be widely adopted, two further important factors are that of timeliness and the recognition of the relevance of an idea by a community. The period between the two World Wars saw the continued decline of the horse, the species for which the profession was founded (Mitsuda 2007), and the emergence of small animal practice as an area for which there was increased public demand (Gardiner 2007). There was a need for qualified veterinarians of the day, if not to change their role, at least to extend the range of species they treated and the range of techniques they could undertake. One of these techniques was that of neutering the female cat, and the lateral approach may have made particular sense to large animal veterinarians used to entering the standing cow abdomen via the same route. (The possibility of a bilateral flank approach, which became a common approach for dealing with left displacement of the abomasum in the cow in the UK, was discussed following the presentation of Wright's paper in 1933.)

The primary intention of this article was never to advocate one method of surgery over another, but rather to answer the question about why different traditions for a surgical procedure became established and to create a different lens (Bordage 2009) through which we might reflect on the modern school of "evidence-based medicine". Although it can never have been the intention of advocates of evidence-based approaches, medicine has seen a trend for clinicians to see "best evidence" as ideas that are received through diffusion following creation by "experts" other than themselves and externally to their own practice (Mylopoulos and Scardamalia 2008). The danger of this understanding is that, once more, views of authority figures are not challenged and "eminence-based" masquerades as "evidence-based" medicine (Shahar 1997, Little 2003). In contrast, others have championed communities of practice as ways in which ideas and techniques can be collectively, and continually, improved (Paavola et al 2004). The down-side of this latter approach can be that reflection becomes individually or collectively dialogic, and confirms the prejudices of the group, as opposed to those of an eminent personage, through a loss of triangulation externally (Hatton and Smith 1995).

The lateral approach to the cat spay is just one example of a range of eminence-driven fashions in veterinary surgery, but in recognising and pragmatically accepting it and other clinical procedures as such, our individual and collective professional responsibility is to constantly challenge our assumptions and practices, to ensure that they represent the best for our clients and patients (Sackett et al 1996, Rosenfeld 2004), whatever the authors of books and the most erudite of presentations may say! A salutary lesson for our profession and society should come from the recognition that experts can be less likely to come to an objective view of the available evidence than unbiased non-experts (Oxman and Guyatt 1993, Mulrow 1994, Greenhalgh 2001), so all must engage in the evaluative process, as much now as before, if genuine progress is to be made.

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Figure 1

Diagram reproduced from the *Veterinary Record* (1946) Vol. 58, p. 19, showing the classic triangle used by generations of UK graduates to locate the site of the flank lesion.

